

V. A NEW ARCTIC WEASEL FROM SOUTHAMPTON
ISLAND, HUDSON BAY.

BY GEORGE MIKSCH SUTTON AND WILLIAM J. HAMILTON, JR.

In studying the mammals collected by the senior author at Southampton Island, Hudson Bay, during 1929-1930, we find that the series of twenty-one weasels belong to an undescribed race of *Mustela arctica*. This form may be described as follows:

Mustela arctica semplei¹ subsp. nov.

Type.—Male, adult, No. 6470, Carnegie Museum Collection, taken at Coral Inlet, South Bay, Southampton Island, October 8, 1929, by George Miksch Sutton. Original Field-Catalog Number: 3M.

Diagnostic Characters: Considerably smaller than *Mustela arctica arctica*. General coloration that of the *arctica*-group, but in summer *upper lips white* as in *Mustela cicognani*, and a small, but distinct, post-orbital white spot in most specimens. Skull as in *arctica*, but zygomata not so strongly bowed outwardly. Average measurements² of twelve adult males in the flesh: Total length, 283 (324-267); tail, 78.5 (94-64); hind foot, 39.6 (43-38). Average measurements of seven adult females in the flesh: Total length, 260 (288-250); tail, 70 (74-63); hind foot, 35 (38-33). The average measurements of four adult male

¹The name *semplei* is given in honor of our friend, Mr. John Bonner Semple, Trustee of the Carnegie Institute, and in recognition of Mr. Semple's personal interest in geographical and zoölogical explorations of the North Country.

²Unfortunately our specimens, with two exceptions, were measured in the field to the end of the fur on the tail. By measuring this tip or "brush" and subtracting this figure from that for the total length and that for the tail, we have obtained *corrected* measurements, which we feel are reasonably trustworthy. It is significant that these *corrected* tail-measurements (average for *corrected* tail measurements of 12 males: 78.5 mm.; of 7 females: 70 mm.) agree surprisingly well with the tail-measurements of two specimens in which the tail vertebræ only were measured in the field (male, Carnegie Museum No. 6470, tail: 72 mm.; and female, Carnegie Museum No. 6472, tail: 69 mm.)

Mustela arctica arctica from Point Barrow, Alaska, listed by Stone³ are as follows: Total length, 376.5; tail, 134; hind foot, 45.7. These specimens were obviously measured to the tip of the tail hairs, and the total length and tail measurements are not, therefore, strictly comparable to these same measurements given above for *semplei*. We find that the "brush" at the end of the tail in fourteen adult *semplei* from Southampton Island measures 46 mm. Taking this as an average length of the "brush," and subtracting it from the averages of Stone's specimens, we obtain the following corrected measurements for the Point Barrow animals: Total length, 330.5; tail, 88;⁴ hind foot, 45.7.

Merriam's⁵ type of *arctica*, an adult male from Point Barrow, Alaska, measured from a dry skin, is said to have the following measurements: "Total length, 380; tail vertebrae, 75; pencil, 55; hind foot, 48 (at least 50 in the flesh)." The total length of this specimen probably was obtained by measuring to the tip of the tail hairs.

It will be noted from a comparison of these measurements with those of *semplei* that the Southampton Island form is appreciably smaller than that of Alaska.

Coloration of *Mustela arctica semplei*. Summer pelage: Upper parts brown (a shade somewhat between *Dresden brown*⁶ and *Prout's brown*) with a somewhat yellowish cast resulting from the color of the under fur, and lighter in general appearance than in *Mustela cicognani*. *Upper lips*, chin, upper throat, sides of cheeks, toes, and small post-orbital spot, white; rest of underparts, including practically all of fore feet, distal half and inner half of hind feet and a distinct line on the under side of the tail extending almost to the black tip, pale yellowish white, ranging from *pale chalcedony yellow* to pale *straw yellow* and *sulphur yellow*, brightest on the sides of the lower neck and in front of

³Stone, Witmer. 1900. Report on the Birds and Mammals collected by the McIlhenny Expedition to Point Barrow, Alaska. Proceedings of the Philadelphia Academy of Natural Sciences, Vol. 52, pp. 44.

⁴This "corrected measurement" is probably somewhat high, since the 46 mm. subtracted in obtaining this figure is the average length of the "brush" in a race, which is admittedly smaller than *M. a. arctica*. We might have used Merriam's figure for this "pencil" (55 mm.) had we been certain that this "pencil" included only the distance from the end of the last caudal vertebra to the tip of the longest hairs.

⁵Merriam, C. Hart. 1896. North American Fauna No. 11, Washington, D. C., p. 16.

⁶All underlined words descriptive of colors in this paper are from Ridgway's Color Standards and Nomenclature.

the fore feet, and palest on the breast and inguinal region; terminal half of the tail, black.

Winter pelage: White all over, except terminal half of tail, which is black. The base of the tail, the hind legs, and to a lesser extent the fore legs are suffused with clear *sea foam yellow*.

Specimens examined: Twenty-one, all from Southampton Island; eighteen from Coral Inlet, South Bay, the type locality; one from Native Point; one from Prairie Point, and one from Ranger or Kashigiak River, near Cape Low.

Range: Southampton Island, so far as known.

A more extended discussion of this animal will be included in the paper upon the mammals of Southampton Island which we are now preparing.

TABLE OF CRANIAL MEASUREMENTS OF *MUSTELA ARCTICA SEMPLEI* FROM SOUTHAMPTON ISLAND, HUDSON BAY.

ADULT MALES.							
Carnegie Museum Number	Greatest Length	Basal Length	Palatal Length	Zygomatic Breadth	Inter-orbital Breadth	Breadth across Post-orbital Process	Foramen Magnum to last Molar
6470.....	40.6	37	16.7	24.5	10.7	12.5	25
6478.....	37.1	34	14	20.7	9.4	12.2	23
6493.....	42.3	38	17	22.5	11	13.3	26
6499.....	40.8	37.4	16.1	22.9	10.9	14.1	25.6
6537.....	42.7	39.3	17	23	10	12.4	26.5
6569.....	39.6	36	16	22.6	10	12	25.4
6570.....	39.5	36	15.5	23.2	10.8	13.4	24.9
6588.....	39.7	36	16.3	23.8	10.2	12.2	24.9
6599.....	41	37.2	16.4	23.7	11	13.4	25.7
6605.....	38.7	36	16	22	10	12.5	24
6691.....	42	38.5	17	25.6	11	.....	26.1
Average for 11 males...	40.3	36.8	16.4	23.1	10.4	12.8	25.2
ADULT FEMALES.							
6472.....	.....	.....	14.6	20	9.7	11.9	.....
6484.....	37.6	34	15	20	9.4	12	23.8
6547.....	37	34.6	14.8	21	10	12.2	24
6600.....	38.4	35	15	21.9	10	12	24.7
6689.....	36.9	33	14.2	22	9.5	12.8	22
6690.....	35.9	32.7	14.1	21.4	9.6	11.7	22.7
Average for 6 females...	37.6	33.9	14.6	21.1	9.7	12.1	23.4

TABLE OF CRANIAL MEASUREMENTS OF *MUSTELA ARCTICA ARCTICA*.

MALES.						
Point Barrow, Alaska (Merriam).....	44.5	20.5	29.5	12.5	14.5	29
Franklin Bay, Arctic Coast (Merriam)	43.5	19.5	27.5	11	13	28.5
St. Michaels, Alaska (Merriam).....	43	.....	26.5	12	13.5	28
Alaska (Stone).....	44	18	.....	11.8	15	29
FEMALE.						
St. Michaels, Alaska (Merriam).....	38	16.5	22.5	10	12	24.5